What is claimed is:

1. A method for dynamic bandwidth provisioning, comprising the steps of:

receiving a provisioning event requesting a maximum data rate for a modem;

generating a modem configuration file for the modem to implement the maximum data rate based on the provisioning event; and

transmitting the modem configuration file to the modem such that the modem will implement the maximum data rate.

2. The method of Claim 1, further comprising the step, following the generating step, of:

rebooting the modem to obtain the modem configuration file.

3. The method of Claim 1, further comprising the steps of:

determining after the receiving step whether the provisioning event is a start time provisioning event after the receiving step;

waiting for a start time if the provisioning event is a start time provisioning event; and

performing the generating and transmitting steps when the start time has been reached.

4. The method of Claim 1, further comprising the steps of:

determining after the receiving step whether the provisioning event is a stop time provisioning event after the receiving step;

waiting for a stop time if the provisioning event is a stop time provisioning event;

generating another modem configuration file for the modem when the stop time has been reached to implement a previous maximum data rate based on a data rate of the modem prior to receiving the provisioning event; and

transmitting the another modem configuration file to the modem such that the modem will implement the previous maximum data rate.

5. The method of Claim 1, wherein the configuration file comprises a digitally signed file.

6. The method of Claim 1, wherein the configuration file comprises an MD5 file.

7. The method of Claim 2, wherein the rebooting step comprises rebooting the modem using at least one of a dynamic host configuration protocol command and another configuration protocol command.

8. The method of Claim 1, wherein the transmitting step comprises transmitting the modem configuration file using at least one of a trivial file transfer protocol, a file transfer protocol, and another transfer utility..

9. The method of Claim 1, where the receiving step comprises receiving the provisioning event through at least one of a customer service representative, an end-user of the modem, and a non-human triggering event through at least one of a hardware device or software mechanism.

10. A system for dynamic bandwidth provisioning, comprising:

a processor; and

a computer readable medium encoded with processor readable instructions that when executed by the processor implement

a provisioning event reception mechanism configured to receive a provisioning event requesting a maximum data rate for a modem,

a modem configuration file generation mechanism configured to generate a modem configuration file for the modem to implement the maximum data rate based on the provisioning event, and

a configuration file transmission mechanism configured to transmit the modem configuration file to the modem such that the modem will implement the maximum data rate.

11. The system of Claim 10, wherein:

the computer readable medium is further encoded with processor readable instructions that when executed by the processor implement

a reboot mechanism configured to reboot the modem to obtain the modem configuration file.

12. The system of Claim 10, further comprising:

a provisioning event categorization mechanism configured to categorize a received provisioning event as one of a non-time dependent provisioning event, a start time provisioning event, and a stop time provisioning event;

a start time provisioning event processing mechanism configured to wait for a start time if the received provisioning event is a start time provisioning event prior to generating the modem configuration fileand transmitting the modem configuration file to the modem; and

a stop time provisioning event processing mechanism configured to

wait for a stop time if the provisioning event is a stop time provisioning event prior to generating another modem configuration file for the modem when the stop time has been reached to implement a previous maximum data rate based on a data rate of the modem prior to receiving the provisioning event, and

transmit the another modem configuration file to the modem such that the modem will implement the previous maximum data rate.

13. The system of Claim 10, wherein the configuration file comprises a digitally signed file.

14. The system of Claim 10, wherein the configuration file comprises an MD-5 file.

15. The system of Claim 11, wherein the reboot mechanism is further configured to reboot the modem using at least one of a dynamic host configuration protocol command and another configuration protocol command.

16. The system of Claim 10, wherein the configuration file transmission mechanism is further configured to transmit the modem configuration file using at least one of a trivial file transfer protocol, a file transfer protocol, and another transfer utility.

17. The system of Claim 10, wherein the provisioning event reception mechanism is further configure to receive the provisioning event through at least one of a customer service representative, an end-user of the modem, and a non-human triggering event through at least one of a hardware device or software mechanism.

18. A system for dynamic bandwidth provisioning, comprising:

means for receiving a provisioning event requesting a maximum data rate for a modem;

means for generating a modem configuration file for the modem to implement the maximum data rate based on the provisioning event; and

means for transmitting the modem configuration file to the modem such that the modem will implement the maximum data rate.

19. A computer program product, comprising:

a computer storage medium; and

a computer program code mechanism embedded in the computer storage medium for causing a processor to perform dynamic bandwidth provisioning, the computer program code mechanism having,

a first computer code device configured to receive a provisioning event requesting a maximum data rate for a modem,

a second computer code device configured to generate a modem configuration file for the modem to implement the maximum data rate based on the provisioning event, and

a third computer code device configured to transmit the modem configuration file to the modem such that the modem will implement the maximum data rate.

20. The computer program product of Claim 19, wherein the computer program code mechanism further comprises:

a fourth computer code device configured to reboot the modem to obtain the modem configuration file.

21. The computer program product of Claim 19, wherein the computer program code mechanism further comprises

a fourth computer code device configured to categorize a received provisioning event as one of a non-time dependent provisioning event, a start time provisioning event, and a stop time provisioning event;

a fifth computer code device configured to wait for a start time if the received provisioning event is a start time provisioning event prior to generating the modem configuration file and transmitting the modem configuration file to the modem; and

a sixth computer code device configured to

wait for a stop time if the provisioning event is a stop time provisioning event prior to generating another modem configuration file for the modem when the stop time has been reached to implement a previous maximum data rate based on a data rate of the modem prior to receiving the provisioning event, and

transmit the another modem configuration file to the modem such that the modem will implement the previous maximum data rate.

22. The computer program product of Claim 19, wherein the configuration file comprises a digitally signed file.

23. The computer program product of Claim 19, wherein the configuration file comprises an MD-5 file.

24. The computer program product of Claim 20, wherein the fourth computer code device is further configured to reboot the modem using at least one of a dynamic host configuration protocol command and another configuration protocol command.

25. The computer program product of Claim 19, wherein the third computer code device is further configured to transmit the modem configuration file using at least one of a trivial file transfer protocol, a file transfer protocol, and another transfer utility.

26. The computer program product of Claim 19, wherein the first computer code device is further configure to receive the provisioning event through at least one of a customer service representative, an end-user of the modem, and a non-human triggering event through at least one of a hardware device or software mechanism.